Maria Cristina Tanzi

List of Publications by Year
in descending order

119 papers	4,542 citations	87723 38 h-index	118652 62 g-index
126 all docs	126 docs citations	126 times ranked	5931 citing authors

#	Article	IF	Citations
1	Advances in biomedical applications of pectin gels. International Journal of Biological Macromolecules, 2012, 51, 681-689.	3.6	433
2	Pectin-Based Injectable Biomaterials for Bone Tissue Engineering. Biomacromolecules, 2011, 12, 568-577.	2.6	213
3	Cytotoxicity of some catalysts commonly used in the synthesis of copolymers for biomedical use. Journal of Materials Science: Materials in Medicine, 1994, 5, 393-396.	1.7	189
4	Compliant electrospun silk fibroin tubes for small vessel bypass grafting. Acta Biomaterialia, 2010, 6, 4019-4026.	4.1	147
5	Chemical stability of polyether urethanes versus polycarbonate urethanes. , 1997, 36, 550-559.		139
6	Injectable pectin hydrogels produced by internal gelation: pH dependence of gelling and rheological properties. Carbohydrate Polymers, 2014, 103, 339-347.	5.1	135
7	Small diameter electrospun silk fibroin vascular grafts: Mechanical properties, in vitro biodegradability, and in vivo biocompatibility. Materials Science and Engineering C, 2015, 54, 101-111.	3.8	134
8	Microspheres leaching for scaffold porosity control. Journal of Materials Science: Materials in Medicine, 2005, 16, 1093-1097.	1.7	119
9	Antibacterial Activity of Zinc Modified Titanium Oxide Surface. International Journal of Artificial Organs, 2006, 29, 434-442.	0.7	101
10	Vascular Tissue Engineering: Recent Advances in Small Diameter Blood Vessel Regeneration. ISRN Vascular Medicine, 2014, 2014, 1-27.	0.7	98
11	Biodegradable microgrooved polymeric surfaces obtained by photolithography for skeletal muscle cell orientation and myotube development. Acta Biomaterialia, 2010, 6, 1948-1957.	4.1	95
12	Bioactive technologies for hemocompatibility. Expert Review of Medical Devices, 2005, 2, 473-492.	1.4	85
13	Adipose tissue engineering: state of the art, recent advances and innovative approaches. Expert Review of Medical Devices, 2009, 6, 533-551.	1.4	82
14	Skin-derived stem cells transplanted into resorbable guides provide functional nerve regeneration after sciatic nerve resection. Glia, 2007, 55, 425-438.	2.5	80
15	Polyurethane foam/nano hydroxyapatite composite as a suitable scaffold for bone tissue regeneration. Materials Science and Engineering C, 2018, 82, 130-140.	3.8	76
16	Synthesis and pharmacological evaluation of poly(oxyethylene) derivatives of 4-isobutylphenyl-2-propionic acid (ibuprofen). Journal of Medicinal Chemistry, 1981, 24, 622-625.	2.9	74
17	Biofunctional chemically modified pectin for cell delivery. Soft Matter, 2012, 8, 4731.	1.2	74
18	Electrospun Silk Fibroin Mats for Tissue Engineering. Engineering in Life Sciences, 2008, 8, 219-225.	2.0	71

#	Article	IF	Citations
19	Design, synthesis and properties of polyurethane hydrogels for tissue engineering. Journal of Materials Science: Materials in Medicine, 2003, 14, 683-686.	1.7	67
20	Collagenâ€Reinforced Electrospun Silk Fibroin Tubular Construct as Small Calibre Vascular Graft. Macromolecular Bioscience, 2012, 12, 1566-1574.	2.1	65
21	Shape memory polymer foams for cerebral aneurysm reparation: Effects of plasma sterilization on physical properties and cytocompatibility. Acta Biomaterialia, 2009, 5, 1508-1518.	4.1	62
22	Nano/Micro Hybrid Scaffold of PCL or P3HB Nanofibers Combined with Silk Fibroin for Tendon and Ligament Tissue Engineering. Journal of Applied Biomaterials and Functional Materials, 2015, 13, 156-168.	0.7	59
23	Ability of polyurethane foams to support cell proliferation and the differentiation of MSCs into osteoblasts. Acta Biomaterialia, 2009, 5, 1126-1136.	4.1	58
24	Polyurethane foam scaffold as in vitro model for breast cancer bone metastasis. Acta Biomaterialia, 2017, 63, 306-316.	4.1	58
25	Silk fibroin-polyurethane scaffolds for tissue engineering. Journal of Materials Science: Materials in Medicine, 2001, 12, 849-853.	1.7	57
26	Calcified Matrix Production by SAOS-2 Cells Inside a Polyurethane Porous Scaffold, Using a Perfusion Bioreactor. Tissue Engineering, 2005, 11, 685-700.	4.9	54
27	Polysaccharides derived from tragacanth as biocompatible polymers and Gels. Journal of Applied Polymer Science, 2013, 129, 2092-2102.	1.3	54
28	Synergistic effects of oxidative environments and mechanical stress onin vitro stability of polyetherurethanes and polycarbonateurethanes. Journal of Biomedical Materials Research Part B, 1999, 45, 62-74.	3.0	53
29	Enhanced wear performance of highly crosslinked UHMWPE for artificial joints. , 2000, 50, 381-387.		53
30	Microcontact Printing of Fibronectin on a Biodegradable Polymeric Surface for Skeletal Muscle Cell Orientation. International Journal of Artificial Organs, 2010, 33, 535-543.	0.7	50
31	In Vitro Stability of Polyether and Polycarbonate Urethanes. Journal of Biomaterials Applications, 2000, 14, 325-348.	1.2	49
32	Title is missing!. Die Makromolekulare Chemie, 1981, 182, 2183-2192.	1.1	46
33	In vitrointeraction of human fibroblasts and platelets with a shape-memory polyurethane. Journal of Biomedical Materials Research - Part A, 2005, 73A, 1-11.	2.1	46
34	Fractionation techniques in a hydro-organic environment. Analytical Biochemistry, 1984, 137, 420-428.	1.1	42
35	Sterilization treatments on polysaccharides: Effects and side effects on pectin. Food Hydrocolloids, 2013, 31, 74-84.	5.6	42
36	Micro- and nano-hydroxyapatite as active reinforcement for soft biocomposites. International Journal of Biological Macromolecules, 2015, 72, 199-209.	3.6	41

#	Article	IF	Citations
37	In vitro study on silk fibroin textile structure for Anterior Cruciate Ligament regeneration. Materials Science and Engineering C, 2013, 33, 3601-3608.	3.8	40
38	<i>In vivo</i> Regeneration of Elastic Lamina on Fibroin Biodegradable Vascular Scaffold. International Journal of Artificial Organs, 2013, 36, 166-174.	0.7	40
39	Electrospun silk fibroinâ€“gelatin composite tubular matrices as scaffolds for small diameter blood vessel regeneration. Journal of Materials Science: Materials in Medicine, 2017, 28, 80.	1.7	40
40	Structural properties of polysaccharide-based microcapsules for soft tissue regeneration. Journal of Materials Science: Materials in Medicine, 2010, 21, 365-375.	1.7	39
41	Shape memory polymer cellular solid design for medical applications. Smart Materials and Structures, 2011, 20, 035004.	1.8	39
42	Synthesis and exchange reactions of biodegradable drug-binding matrices. Die Makromolekulare Chemie, 1979, 180, 375-382.	1.1	37
43	Poly(ethylene glycol) and Hydroxy Functionalized Alkane Phosphate Mixed Self-Assembled Monolayers to Control Nonspecific Adsorption of Proteins on Titanium Oxide Surfaces. Langmuir, 2010, 26, 6529-6534.	1.6	36
44	Novel class of collector in electrospinning device for the fabrication of 3D nanofibrous structure for large defect loadâ€bearing tissue engineering application. Journal of Biomedical Materials Research - Part A, 2017, 105, 1535-1548.	2.1	34
45	Heparin adsorbing capacities at physiological pH of three poly(amido-amine) resins, and of poly(amido-amine)-surface-grafted glass microspheres. Biomaterials, 1983, 4, 218-221.	5.7	32
46	Chemico-physical modifications induced by plasma and ozone sterilizations on shape memory polyurethane foams. Journal of Materials Science: Materials in Medicine, 2010, 21, 2067-2078.	1.7	32
47	New Perspectives in Cell Delivery Systems for Tissue Regeneration: Natural-derived Injectable Hydrogels. Journal of Applied Biomaterials and Functional Materials, 2012, 10, 67-81.	0.7	32
48	Pectins from <i>Aloe Vera</i>: Extraction and production of gels for regenerative medicine. Journal of Applied Polymer Science, 2014, 131, .	1.3	32
49	In vitro Stability of Polyether and Polycarbonate Urethanes. Journal of Biomaterials Applications, 2000, 14, 325-348.	1.2	32
50	Macromolecular drugs I : Long-lasting antilipolytic activity of nicotinic acid bound to a polymer. Pharmacological Research Communications, 1976, 8, 379-386.	0.2	31
51	Ability of polyurethane foams to support placenta-derived cell adhesion and osteogenic differentiation: preliminary results. Journal of Materials Science: Materials in Medicine, 2010, 21, 1005-1011.	1.7	28
52	Enzymatic cross-linking of human recombinant elastin (HELP) as biomimetic approach in vascular tissue engineering. Journal of Materials Science: Materials in Medicine, 2011, 22, 2641-2650.	1.7	28
53	Chemically crosslinked gelatin hydrogels as scaffolding materials for adipose tissue engineering. Journal of Applied Polymer Science, 2019, 136, 47104.	1.3	28
54	Assessment of scaffold porosity: the new route of micro-CT. Journal of Applied Biomaterials and Biomechanics, 2011, 9, 165-175.	0.4	27

#	Article	IF	Citations
55	Reactive hydroxyapatite fillers for pectin biocomposites. Materials Science and Engineering C, 2014, 45, 154-161.	3.8	27
56	Preparation and Characterization of Shape Memory Polymer Scaffolds via Solvent Casting/Particulate Leaching. Journal of Applied Biomaterials and Functional Materials, 2012, 10, 119-126.	0.7	26
57	Mineral phase deposition on pectin microspheres. Materials Science and Engineering C, 2010, 30, 491-496.	3.8	24
58	Grafting reactions and heparin adsorption of poly(amidoamine)-grafted poly(urethane amide)s. Biomaterials, 1992, 13, 425-431.	5.7	23
59	Exploiting novel sterilization techniques for porous polyurethane scaffolds. Journal of Materials Science: Materials in Medicine, 2015, 26, 182.	1.7	22
60	Physical characterization of acrylic bone cement cured with new accelerator systems. Clinical Materials, 1991, 8, 131-136.	0.5	21
61	Linear poly(ethylene oxide)-based polyurethane hydrogels: polyurethane-ureas and polyurethane-amides. Journal of Materials Science: Materials in Medicine, 1999, 10, 635-639.	1.7	21
62	Structure and properties of polycaprolactone/ibuprofen rods prepared by melt extrusion for implantable drug delivery. Polymer Bulletin, 2017, 74, 4973-4987.	1.7	19
63	Synthesis and exchange reactions of some polymeric benzotriazolides. Journal of Polymer Science: Polymer Chemistry Edition, 1978, 16, 1435-1441.	0.8	18
64	Effects of the Magnetic Resonance Field on Breast Tissue Expanders. Aesthetic Plastic Surgery, 2012, 36, 901-907.	0.5	18
65	Comparative physical tests on segmented polyurethanes for cardiovascular applications. Clinical Materials, 1991, 8, 57-64.	0.5	17
66	Adipose-derived stem cells could sense the nano-scale cues as myogenic-differentiating factors. Journal of Materials Science: Materials in Medicine, 2013, 24, 2439-2447.	1.7	17
67	Macroinorganics IV: Thermodynamic functions relative to the protonation of a poly(amido-amine) with repeating unit containing 3 amino groups. Polymer, 1979, 20, 1298-1300.	1.8	16
68	Macro inorganics V. Basicity and complexing ability of a new class of poly(amido-amines) with tertiary amino groups present both in the main chain and as side substituent. Inorganica Chimica Acta, 1980, 41, 25-29.	1.2	15
69	In Vitro Interactions of Biomedical Polyurethanes with Macrophages and Bacterial Cells. Journal of Biomaterials Applications, 2002, 16, 191-214.	1.2	15
70	Programmed cell delivery from biodegradable microcapsules for tissue repair. Journal of Biomaterials Science, Polymer Edition, 2015, 26, 1002-1012.	1.9	15
71	In vitro cell delivery by gelatin microspheres prepared in water-in-oil emulsion. Journal of Materials Science: Materials in Medicine, 2020, 31, 26.	1.7	14
72	Synthesis and characterization of poly(amido-amine)s belonging to two different homologous series. Biomaterials, 1984, 5, 357-361.	5.7	13

#	Article	IF	Citations
73	Heparinizable graft copolymers from chlorosulphonated polyethylene with poly(amido-amine) segments. Biomaterials, 1985, 6, 273-276.	5.7	13
74	Heparinizable segmented polyurethanes containing poly-amidoamine blocks. Journal of Biomedical Materials Research Part B, 1989, 23, 863-881.	3.0	13
75	Amides from N-phenylpiperazine as low-toxicity activators in radical polymerizations. Polymer, 1990, 31, 1735-1738.	1.8	13
76	Comparative biological tests on segmented polyurethanes for cardio-vascular applications. Clinical Materials, 1993, 12, 17-23.	0.5	13
77	Electrospun silk fibroin tubular matrixes for small vessel bypass grafting. Materials Technology, 2009, 24, 52-57.	1.5	13
78	Polysaccharide-based hydrogels with tunable composition as 3D cell culture systems. International Journal of Artificial Organs, 2018, 41, 213-222.	0.7	13
79	Synthesis and characterization of piperazine-derived poly(amido-amine)s with different distributions of amido- and amino-groups along the macromolecular chain. Polymer, 1984, 25, 863-868.	1.8	12
80	Bioabsorbable scaffold forÂinÂsitu bone regeneration. Biomedicine and Pharmacotherapy, 2006, 60, 386-392.	2.5	12
81	Activated derivatives of succinic and glutaric half-esters of polypropylene glycols, and their exchange reactions with hydroxy- and amino-compounds. Polymer, 1982, 23, 1689-1692.	1.8	11
82	Polymers and copolymers of N-acryloyl-Nâ€²-phenyl-piperazine. Polymer, 1990, 31, 1577-1580.	1.8	11
83	New heparinizable modified poly(carbonate urethane) surfaces diminishing bacterial colonization. Journal of Materials Science: Materials in Medicine, 2007, 18, 2109-2115.	1.7	11
84	Manufacturing Technologies. , 2019, , 137-196.		11
85	Polyurethane-coated, self-expandable biliary stent: An experimental study. Academic Radiology, 1995, 2, 1078-1081.	1.3	10
86	In vivo study of polyurethane-coated gianturco-rosch biliary Z-stents. CardioVascular and Interventional Radiology, 1999, 22, 510-514.	0.9	9
87	Trends in biomedical engineering: focus on Smart Bio-Materials and Drug Delivery. Journal of Applied Biomaterials and Biomechanics, 2011, 9, 87-97.	0.4	9
88	New Polymeric and Oligomeric Matrices as Drug Carriers. , 1983, , 77-95.		9
89	Synthesis of tertiary poly(amido-amine)s with amido- and amino-groups randomly arranged along the macromolecular chain. Polymer, 1982, 23, 1233-1236.	1.8	8
90	Novel Poly(urethane-aminoamides): an in vitro study of the interaction with heparin. Journal of Biomaterials Science, Polymer Edition, 2000, 11, 353-365.	1.9	8

#	Article	IF	Citations
91	Poly(Ethylene Glycol) and Hydroxy Functionalized Alkane Phosphate Self-Assembled Monolayers Reduce Bacterial Adhesion and Support Osteoblast Proliferation. International Journal of Artificial Organs, 2011, 34, 898-907.	0.7	8
92	Genotoxicity of N-acryloyl-Nâ€²-phenylpiperazine, a redox activator for acrylic resin polymerization. Mutation Research-Fundamental and Molecular Mechanisms of Mutagenesis, 1992, 282, 99-105.	1.2	6
93	Different Processing Methods to Obtain Porous Structure in Shape Memory Polymers. Materials Science Forum, 2007, 539-543, 663-668.	0.3	6
94	Poly-Paper: A Sustainable Material for Packaging, Based on Recycled Paper and Recyclable with Paper. Journal of Applied Biomaterials and Functional Materials, 2016, 14, 490-495.	0.7	6
95	Characterization of thermal properties and crystallinity of polymer biomaterials. , 2017, , 123-146.		6
96	Cytocompatibility of polyurethane foams as biointegrable matrices for the preparation of scaffolds for bone reconstruction. Journal of Applied Biomaterials and Biomechanics, 2003, 1, 58-66.	0.4	6
97	Copolymerization and activation of peroxide decomposition with acrylic derivatives of tertiary aromatic amines. Polymer, 1994, 35, 3285-3289.	1.8	5
98	Polyurethane-maleamides for cardiovascular applications: synthesis and properties. Journal of Materials Science: Materials in Medicine, 1999, 10, 711-714.	1.7	5
99	Techniques of Analysis. , 2019, , 393-469.		5
100	Polymeric hydrazides by reaction of hydrazine with polymeric benzotriazolides. Journal of Polymer Science: Polymer Chemistry Edition, 1979, 17, 277-279.	0.8	4
101	N-phenyl piprazine-polyester derivative as curing activator of unsaturated resins. Journal of Applied Polymer Science, 1986, 31, 1083-1091.	1.3	3
102	N-acryloylâ€"Nâ€²-phenylpiperazine as curing activator of unsaturated resins. Journal of Applied Polymer Science, 1991, 42, 1371-1376.	1.3	3
103	Cytocompatibility of two segmented biomedical polyurethanes. Journal of Materials Science: Materials in Medicine, 1994, 5, 705-710.	1.7	3
104	Biomimetic hybrid scaffolds for osteo-chondral tissue repair: Design and osteogenic differentiation of human placenta-derived cells (hPDC). , 2015, 2015, 1753-6.		3
105	Ibuprofen-loaded PCL meshes manufactured using rapid tooling for ocular orbital repair. Polymer Testing, 2017, 62, 33-40.	2.3	3
106	2D and 3D Electrospun Silk Fibroin Gelatin Coatings to Improve Scaffold Performances in Cardiovascular Applications. , 0, , .		2
107	Advanced Polyurethanes for Blood Contacting Applications Containing Pime as â€œSmartâ€• Heparin-Adsorbing Moieties. , 2004, , 51-66.		2
108	Heparinizable Segmented Polyurethanes for Cardio-Vascular Applications. , 1986, , 91-99.		2

#	Article	IF	Citations
109	Shape Memory Polymer Porous Structures for Mini-Invasive Surgical Procedures. , 2006, , .		2
110	3D polyurethane/Î±-TCP composite scaffolds for bone tissue engineering. , 0, , .		1
111	Bio-Instructive Scaffolds for Muscle Regeneration. , 2017, , 161-186.		1
112	New polymeric and oligomeric matrices as drug carriers. Critical Reviews in Therapeutic Drug Carrier Systems, 1986, 2, 175-244.	1.2	1
113	Mechanical properties and wear performance of cross-linked UHMWPE for orthopaedic joints. , 0, , .		0
114	Protein Immobilization onto Newly Developed Polyurethane-Maleamides for Endothelial Cell Growth. , 2002, , 235-242.		0
115	G.P.16.02 Muscle tissue engineering: Strategies for repair and regeneration in human degenerative muscle diseases. Neuromuscular Disorders, 2007, 17, 874-875.	0.3	0
116	Characterization of 2D polymeric biomaterial structures or surfaces. , 2017, , 3-19.		0
117	Advanced Applications. , 2019, , 471-545.		0
118	Development of bioabsorbable PCL/ibuprofen mesh for maxillofacial repair using prototype injection mold. , 2013, , 355-359.		0
119	Fabrication of chemically cross-linked porous gelatin matrices. Journal of Applied Biomaterials and Biomechanics, 2009, 7, 194-9.	0.4	0